Response to Office Action dated May 25, 2005

U.S. Serial No.: 09/937,331; filed September 21, 2001

Inventor: Kunze et al.

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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

## **Listing of Claims**

- 13. (Currently Amended) A poker vibrator to densify for densifying a flowing material comprising:
  - a vibration unit in which an oscillator with an electric motor is located;
  - a switching unit separated from the vibration unit through an elastic connection;
  - a measurement device that to detects at least one operating parameter of the poker vibrator; and with
  - an evaluation circuit that to evaluates measured values detected by the measurement device and that produces a signal based on a measured change in the operating parameter that corresponds to a change in a densified state of the material;

wherein

-the <u>at least one</u> operating parameter is <u>a parameter</u> from the group consisting of <u>the a</u> motion of the vibration unit, <u>the an</u> oscillatory amplitude of the vibration unit, <u>its an</u> oscillatory frequency of the vibration unit, <u>the an</u> RPM of the electric motor, <u>the an</u> electric excitation frequency of the electric motor, and <u>the a</u> winding temperature of a stator of the electric motor; and that

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of the material.

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- a signal is produced by the evaluation circuit from the measured value and thus from a change in the operating parameter that corresponds to a change in a densified state
- 14. (Currently Amended) A poker vibrator according to claim 13, wherein the evaluation circuit is designed to feeds electrical energy to the measurement device.
- 15 (Previously Presented) A poker vibrator according to claim 13, wherein the measurement device includes at least one motion measurement device provided in the vibration unit.
- 16. (Previously Presented) A poker vibrator according to claim 15, wherein the evaluation circuit is provided inside the switching unit to feed the motion measurement device and evaluate the signals sent from the motion measurement device.
- 17. (Previously Presented) A poker vibrator according to claim 13, wherein the motion measurement device is an acceleration detector.
- 18. (New) A poker vibrator according to claim 17, wherein a measurement direction of the acceleration detector is generally perpendicular to the longitudinal axis of the vibration unit.
- 19. (New) A poker vibrator according to claim 13, wherein the motion measurement device

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is a combination of a first acceleration detector and a second acceleration detector that measure accelerations in mutually perpendicular directions from each other.

- 20. (New) A poker vibrator according to claim 19, wherein the measurement directions of both the first and second acceleration detectors are generally perpendicular to the longitudinal axis of the vibration unit.
- 21. (New) A poker vibrator according to claim 13, further comprising:a display that illustrates a change in the densified state of the material to an operator.
- 22. (New) A poker vibrator according to claim 21, wherein the display includes a light bar having a variable length of illumination depending on the densification state of the material.
- 23. (New) A poker vibrator according to claim 21, wherein the display provides a variable brightness depending on the densification state of the material.
- 24. (New) The poker vibrator according to claim 13, wherein the evaluation circuit detects an optimum densification state of the material and generates a signal indicative thereof.